3.13 TRANSPORTATION AND CIRCULATION

This section describes roads and parking facilities in the vicinity of the Broad Beach Restoration Project (Project) and the impacts of the Project on these facilities and their use by the public when accessing public trust lands and waters. Offshore marine transportation movement is discussed in Section 3.14, *Marine Vessel Safety*. The analysis focuses on adjacent roadways that would likely be affected by construction and operation of Project components. Public transit is not discussed, as the public's use of transit to access the shoreline is unlikely to be affected by short-term construction activities.

3.13.1 Environmental Setting Pertaining to the Public Trust

Broad Beach Restoration Area Location and Description

The Broad Beach Restoration Area (Project area) encompasses approximately 42 acres extending laterally for more than 6,700 feet from Lechuza Point to Trancas Creek Lagoon, including both public trust lands and adjacent private lands that support residential uses. The Project area also includes existing vertical and lateral access easements that could be impacted by the Project. Additionally, it includes the Zuma Beach parking lot adjacent to Trancas Creek, proposed for temporary construction staging.

PCH in the Project vicinity is a 50- to 55-mph, four-lane divided highway with scattered at grade intersections with un-signalized and signalized side street access. Free road shoulder parking is available on the ocean side of PCH along its Zuma Beach frontage.

Off-site Project Areas Location and Description

The primary transportation and circulation routes that may be affected in Off-site Project areas include Pacific Coast Highway (PCH) and Broad Beach Road. These areas are the primary transportation connections to Broad Beach.

There are no public trust resources in the vicinity of the borrow sites or sand transportation routes that would be affected by onshore transportation.

Relationship of Transportation Facilities and Services with Public Trust Resources and Values

Transportation and circulation relate to public trust resources to the extent that construction activities may affect the public's ability to access the shoreline and ocean

waters. One of the values of the public trust resources is that they should be available for the public to use and enjoy, and the public's ability to access these resources should not be impaired by poor road conditions, changes in parking capacity, or other transportation obstacles.

Transportation, Circulation, and Parking Overview

Pacific Coast Highway (PCH)

PCH, also known as Highway 1 or State Route 1 (SR-1), is a State route that travels east and west through the study area. PCH provides four travel lanes (two in each direction) with a center median in this reach that includes left turn lanes at intersections. Traffic volumes on PCH are approximately 25,000 average daily trips (ADTs) on the segment of PCH that fronts Zuma Beach. Posted speed limits along PCH are 55 miles per hour (mph) west of Trancas Canyon Road and 50 mph east of Trancas Canyon Road. The line of sight for drivers is generally excellent. Free road shoulder parking is available on the entire oceanside frontage of PCH along the western of end of Zuma Beach.

Broad Beach Road

Broad Beach Road is a two-lane, un-gated public residential roadway that provides the primary access to homes along the coast in the Project area. Broad Beach Road extends easterly for 1.5 miles from its terminus at the intersection of Broad Beach Road and PCH along the coast where it intersects PCH and Trancas Canyon Road at a signaled intersection.

Broad Beach Road is a quiet, two-lane, residential street with informal parking available for coastal access on the road shoulder. In places, private encroachments for landscaping or retaining walls displace parking spaces. Construction worker parking for ongoing remodels can also occupy parking spaces.

Two public coastal accessways are located along central and western Broad Beach. These access points lead from on-street, road-shoulder parking opposite residential parcels and over the existing emergency revetment to the beach. Existing parking along Broad Beach Road is generally located on the unpaved road shoulder in un-marked spaces and is fee free. Availability is dependent on the number of beachgoers at any given time; however, open parking is generally available within walking distance of these access points. Parking is not specified for beach use, and is used by the residents living

along Broad Beach Road as well as by contractors and construction workers employed for remodels of existing homes.

Zuma Beach Parking Lot

Zuma Beach is a Los Angeles County-owned and operated park which extends for approximately 1.5 miles along the coast east of Broad Beach, with public parking lots situated between PCH and the beach for almost its entire reach. Primary park access is located at the far eastern end of Zuma Beach at the park entrance intersection with Busch Drive. Access to these parking lots is via the Zuma Beach Access Road, a frontage road located just seaward of PCH. The westernmost Zuma Beach parking lot is located 700 feet east of the eastern end of Broad Beach. The public uses Zuma Beach parking lots to access public trust lands along the shoreline, including Broad Beach to the west. More than 200 designated parking stalls are available in the westernmost section of the lot at Zuma Beach County Park. Limited field observations seem to indicate that this western parking lot is relatively underutilized, with low to moderate occupancy rates (AMEC 2012).

3.13.2 Regulations Pertaining to the Public Trust

State

California Department of Transportation (Caltrans)

The California Department of Transportation (Caltrans) maintains the State Highway System, including PCH, which provides the main vehicle access to the Project area. Maximum load limits for trucks and safety requirements for oversized vehicles are generally regulated by Caltrans for operation on highways.

Local

City of Malibu

The city of Malibu Local Coastal Program (LCP) contains general goals and policies intended to improve access and use of coastal resources. The provision regarding traffic is geared toward “protecting existing and improving future parking availability near shoreline and trail access ways throughout the city” (city of Malibu 2012).

3.13.3 Public Trust Impact Criteria

Substantial impact criteria were adapted from the city of Malibu LCP. A substantial impact to the public trust resources would occur if the Project resulted in:

- Reduced access to public parking; or

- Additional obstacles to vehicular access to public trust resources (e.g., construction of a gate, substantial new traffic congestion, damage to roadways).

3.13.4 Public Trust Impact Analysis

This section describes direct and indirect impacts that may potentially result from the implementation of the Project. Impacts discussed below may occur in the Project area and/or in the Off-site Project area, including the borrow sites, sand transportation routes, and the downcoast beaches.

Impact TR-1: Construction-Generated Impacts in the Vicinity of Broad Beach

Traffic generated from construction activities would have a short-term, unsubstantial impact on public use of roadways to access the shoreline (Unsubstantial with Implementation of Avoidance and Minimization Measures, Class UI).

Impact Discussion

Traffic generated from construction activities would consist of daily trips by employees and periodic trips associated with delivery of equipment and construction materials, including tractor-trailer trips. This may result in potential indirect impacts to both the Project area and the nearby Off-site Project areas. The proposed initial Project construction timeline is estimated to be approximately 6 months, although this may vary depending upon weather and other factors. Therefore, any potential impacts associated with traffic generated from construction activities would be of a short duration. If construction for the Project overlaps with other projects (e.g., construction of the Broad Beach Road Biofiltration Project or developments off of Trancas Creek Road), impacts to transportation may increase beyond what is discussed in this section as a result of increased disruption of traffic flows by construction vehicle access, lane closures, etc.

Impacts to Pacific Coast Highway

The Project could create potential access and safety issues during initial mobilization, periodic equipment deliveries, and daily construction activities. Initial mobilization would last several days and would involve delivery of heavy equipment, fencing, dredge pipeline, and other materials via tractor-trailer trucks. Ongoing daily construction activities would add an average of 34 daily trips during the 6-month construction period. This would result in a 0.001 percent increase in ADT volume along PCH. Routes for employee and tractor-trailer truck access to the Zuma Beach parking lot have not been specified by the Applicant, creating the potential for disruption of automobile and bike flows along PCH due to increased turning movements at unsignalized intersections. Access at the main Zuma Beach County Park entrance at the intersection of PCH and Busch Drive, located at the east end of Zuma Beach, would reduce impacts to the traffic flow and potential safety impacts on PCH. Vehicles would then proceed westward for approximately 1.4 miles along the Zuma Beach Access Road, located between PCH

and the shoreline parking lots, to the Project staging area. However, depending on the time of year, use of the Zuma Beach Access Road by heavy equipment could cause limited short-term disruption of coastal access parking due to delays associated with construction vehicles. Impacts associated with both material delivery and employee parking would be short-term, but would require preparation of a construction management plan to ensure public safety and maintenance of traffic flows.

Impacts to Zuma Beach Parking Lot

Construction employees associated with the Project would park in the western end of the Zuma Beach parking lot in order to prevent parking impacts to coastal access parking on Broad Beach Road. The construction staging area and construction employee parking would collectively occupy approximately 50 spaces in the western area of Zuma Beach parking lot. The western parking area contains 272 spaces used by visitors to the Trancas area of Zuma Beach and by Broad Beach visitors. Impacts to parking resources would not be substantial as this impact would be short-term and may occur in winter 2012-2013 outside the peak summer period for beach visitation. Unrestricted roadside parking is also available along Broad Beach Road and along the shoulder of PCH in the vicinity of the construction staging area. The county-owned public parking lot at Zuma Beach also contains additional parking that is not fully utilized during the Winter period when the construction period is scheduled (Associated Transportation Engineers [ATE] 2012).

Parking at the west end of Zuma Beach where construction staging activities would be located is often underutilized, even in the late spring and early summer (photo taken Saturday, June 16, 2012, mid-day). Free road shoulder parking is also available on PCH.

Avoidance and Minimization Measures

AMM TR-1a: Construction Management Plan (Zuma Beach Parking Lot Staging Area). The Project Applicant shall provide proof that a construction management plan has been submitted for review and approval by the California State Lands Commission, Caltrans, and the Los Angeles County Department of Beaches and Harbors. The plan shall include the following elements:

- *PCH/Busch Drive Access*. Employees, fuel, and service trucks shall be required to use the PCH/Busch Drive intersection for access to the construction staging area.

- *Zuma Beach Parking Lot and Access Improvements*. The Applicant shall improve the PCH/Site Access connection as necessary to make passable for trucks transporting construction equipment and materials at the beginning and end of the construction period. See Appendix I for further discussion.
- *Restricted PCH Parking*. Parking that occurs along PCH immediately adjacent to the access connection shall be restricted as necessary on days when trucks are using the PCH access connection in order to maximize safety when trucks are transporting construction equipment and materials at the beginning and end of the construction period.
- *Restricted Hours*. Trucks transporting construction equipment and materials to and from the site shall be scheduled outside of the peak commuter periods on PCH (7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM).
- *Damage Repair*. The Applicant shall repair any damage to the PCH/Site Access connection or the construction staging area caused during the construction phase of the Project.
- *Notification Posts*. The Applicant shall post signage to notify beach users of construction areas and the presence and use of construction equipment.
- *Safety Cordoning*. The Applicant shall cordon off construction areas where heavy equipment is being used, as necessary, to ensure safety of beach users.

Rationale for Avoidance and Minimization Measures

The implementation of AMM TR-1a would ensure that short- and long-term impacts to the transportation and circulation network in the immediate vicinity of the Project area would be minimized. Further, it would ensure that temporary traffic impacts in the vicinity of Broad Beach and the heavily used Zuma Beach would be minimized to the extent feasible. Following the implementation of AMM TR-1a, adverse impacts to transportation and circulation would be reduced to an acceptable level.

Impact TR-2: Increased Parking Demand along Broad Beach Road

A wider dry sandy beach at Broad Beach following renourishment may attract more users which would increase parking demand on Broad Beach Road (Unsubstantial, Class U).

Impact Discussion

The restoration and renourishment of Broad Beach is expected to attract more beachgoers to Broad Beach. The increased number of beachgoers would result in an increased number of vehicles parking along Broad Beach Road, which currently has an estimated 320 spaces along its 1.5-mile-long shoulder. When combined with ongoing

remodel projects and loss of some parking due to private encroachment into the road shoulder, future recreationists seeking access to public trust resources along the beach may experience occasional difficulty locating parking near existing access points. This impact is expected to be unsubstantial given the 320 spaces along Broad Beach Road and with the continued availability of safe and accessible parking along PCH and at Zuma Beach County Park parking lot.

Table 3.13-1. Summary of Transportation Impacts and Avoidance and Minimization Measures

Impact	Avoidance and Minimization Measures
TR-1: Construction-Generated Traffic in the Vicinity of Broad Beach	**AMM TR-1a:** Construction Management Plan
TR-2: Increased Parking Demand Along Broad Beach Road	No AMMs recommended